NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

BEDDING

(Acre)
Code 310

DEFINITION

Plowing, blading, or otherwise elevating the surface of flat land into a series of broad, low ridges separated by shallow, parallel channels with positive drainage.

PURPOSE

To improve the drainage of surface water.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to areas with flat to nearly flat topography and with poorly drained soils. It is generally applicable where land use does not warrant more intensive drainage.

CRITERIA

Laws and regulations. All planned work shall comply with federal, state, and local laws, rules, and regulations.

Bedding shall slope in the direction of the available land slope so that drainage can be provided without causing harmful erosion. The velocity of water in the channels shall be slow enough to prevent erosion during storm events. Beds shall be shaped and cross-row ditches provided where required to provide free movement of water from the crown to the dead furrow.

Soils must be of sufficient depth to provide a satisfactory root zone after bedding.

Crowns shall provide a cross slope of not less than 0.3 percent.

Crown height, width, and maximum length of beds shall be determined on the basis of site conditions and crop requirements and shall meet the minimum requirements shown in Table 1.

Table 1 - Bedding Dimension Requirements

Crop	Min. Height 1/ (ft)	Max. Width 2/ (ft)	Max. Length 3/ (ft)
Pasture	1.0	120	1,320
Cultivated Crops	1.0	80	1,320
Forest	0.5	24	2,640
Citrus For surface drainage only	1.0	120	1,320
When needed to improve subsurface drainage	2.5	60	1,320

1/ Minimum difference in elevation between the bottom of the channels and top of the finished bed.

2/ Limiting horizontal distance between channels.

3/ The maximum length of channels before emptying into a larger cross section. If channels bordering individual beds are designed to provide needed capacities in accordance with standards and specifications for Surface Drainage, Main or Lateral, Code 608, the maximum length shall not apply.

Parallel channels shall be graded toward an outlet.

An outlet, natural or constructed, must have sufficient capacity and depth to provide for removal of water from the parallel channels.

CONSIDERATIONS

Parallel channels may be shallow and side slopes steep or flat, based on the soil, crops grown, and local construction and maintenance methods.

Areas where the rooting depth may limit plant growth after construction of the beds should be identified on the plan map.

Consider practices that will mitigate off-site water quality impacts (i.e., wetland treatment areas, filter strips, buffer strips, etc.)

If the bedding will exceed the depth of prior disturbance, this activity could affect significant cultural resources.

PLANS AND SPECIFICATIONS

Plans and specifications for bedding shall identify the area where the practice will be applied, the direction of the channel drainage, the crown height, side slope, width, and length of the bed cross section, and location of the outlet.

OPERATION AND MAINTENANCE

The beds shall be maintained to the planned height. Remove sediment from the channels as necessary to facilitate drainage and to prevent ponding.

Maintain the outlet in a stable condition.

REFERENCES

NRCS Conservation Practice Standard
Surface Drainage Main or Lateral, Code 608